APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,164	04/09/2001	Amando B. Isip JR.	47185/08172	8279

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EXAMINER
TO, BAOQUOC N

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 12/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.
    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1.   Claims 1, 13, 20 and 27 are amended and claims 28-37 are newly added claims

filed in the amendment on 09/29/03.

Response to Arguments

2.   Applicant's arguments filed 09/29/03 have been fully considered but they are not

persuasive.

The applicant argues "Courter fails to disclose creating the log file."

The examiner respectfully disagrees with the above argument. Courter

employed the log file to record the changes made to the data in the primary location and

copied back the changes to from the secondary location back to the primary location

using the changed records in the log in the recovery processes. Courter's log file is

created before the storing process (col. 4, lines 32-55).

The "contents of the log file being limited to a subset of all log records" adds to

the claim limitation; however, it does not distinguish over Courter. The changes of

modification of records are being logged into the log file. The association of changes

are changed that made to the records of the primary copies. Therefore, the

modifications of records are also the subset of records in the log file.

The applicant also argues "the combination of Courter et al. and Barber et al. is

missing at least one claim limitation, namely "storing the log record in a first log file

recording selected changes..."

The examiner respectfully disagrees with the above argument. Courter states the modifications are logged into the log file (col. 4, lines 45-46). This is the first log file recording the changes or modifications to the data.

3.   Claims 1-7 and 13-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courter et al. (US. Patent No. 6,119,128).

Regarding on claims 1, 13, 20 and 27, Courter teaches a method for reorganizing data, comprising:

Reading each record of a source file (primary storage device) (col. 4, lines 40-41);

Writing (copy) each record to a destination file (secondary storage device) (col. 4, lines 41-43);

Creating a log file, the content of the log file being limited to a subset of all log records (the changes of all the primary file being logged into the log file) (col. 4, lines 45-46), each log record associated with a change to be made to the destination file (col. 4, lines 45-46);

Processing each record of the log file to effect the associated change to the destination file (col. 4,lines 45-47); and

Courter does not explicitly teach replacing the source file with the destination file. However, Courter teaches, "the recovery system 122 of the present invention copies the table partitions and partition indexes from the secondary data storage device back to the database" (col. 4, lines 48-20). This teaches copying is the replace the source file

with the destination file. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include copying the data from the secondary storage device to the primary to storage device in the event of system failures.

Regarding on claims 2, 14 and 21, Courter teaches the source file is an index file (col. 4, lines 37-38).

Regarding on claims 3, 15 and 22, Courter teaches the source file is a data file (data in storage is data file) (col. 4, lines 45-50).

Regarding on claims 4, 16 and 23, Courter teaches the step of creating a log file is performed in accordance with instruction of a DBMS log routine (DBMS) (col. 3, lines 29-30).

Regarding on claims 5, 17 and 24, Courter teaches the log file contains a subset of all records processed by the RDBMS log routine (col. 5, lines 46-54).

Regarding on claims 6, 18 and 25, Courter teaches the log file records are selected based on a program call establish by reorganization utility (col. 6, lines 5-13).

Regarding on claims 7, 19 and 25, Courter teaches the program call is removed prior termination of the reorganization utility (col. 6, lines 14-20).

Regarding on claims 28, 31, and 37, Courter teaches a method of reorganizing the data, comprising:

Creating an empty destination file (second data storage) (col. 4, lines 40-42);

Establishing a program call to copy selected log records during a reorgainization (copies of the database partition are stored in the secondary index) (col. 4, lines 40-42);

Reading each record of a source file (read data in order to copy the data to the second storage devices) (col. 4, lines 35-40);

Writing each record to the destination file, thereby creating a reorganized copy of the source file (copies the data into the second storage devices) (col. 4, lines 35-40);

Employing the established program call to create a log file (log file), the contents of the log file being limited to a subset of all log records (all modification to the records are the subset of records), each log record associated with a change to be made to the destination file (col. 4, lines 45-47);

Removing the established program call (col. 4, lines 45-55);

Reading each log record of the log file (read before copy back from the secondary to primary copy) (col. 4, lines 46-50);

Processing each record of the log file to effect the associated change to the destination file (the recovery system 222 extracts all of the pertinent log records containing updates to all of the object being recovered) (col. 4, lines 48-51); and

Courter does not explicitly teach replacing the source file with the destination file. However, Courter teaches, "the recovery system 122 of the present invention copies the table partitions and partition indexes from the secondary data storage device back to the database" (col. 4, lines 48-20). This teaches copying is the replace the source file with the destination file. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include copying the data from the secondary storage device to the primary to storage device in the event of system failures.

Regarding on claims 29, 32 and 35, Courter teaches the source file is an index file (col. 4, lines 35-45).

Regarding on claims 30, 33 and 36, Courter teaches the source file is a data file (col. 4, lines 35-45).

Courter teaches the limitations of claim 34, and further discloses a professor (one or more processor); a memory connected to said processor storing program to control the operation of said processor (one or more storage devices); the processor operate with the program in the memory to (col. 3, lines 11-17).

4.   Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courter et al. (US. Patent No. 6,119,128) and in view of Barber et al. (US. Patent No. 6,173,292).

Regarding on claim 8, Courter teaches a method for logging changes by a database management system, comprising:

Identifying a change to be logged (modification) (col. 4, lines 45-46);

Creating a log record based on the change (modification are logged in a log file) (col. 4, lines 46-47);

Determining whether the changes affects a reorganizing process (col. 6, lines 6-13);

Storing the log record in the first log file recording selected changes if the change affects the reorganization process (col. 5, lines 48-50); and

Courter does not explicitly teach storing the log record in a second log file

recording all changes. However, Barber teaches, "the transaction control 218 builds an

in-memory version of the item for the object, by extracting the modified/inserted items

from the log file 220 record and unchanged item for their "old" positions in the object"

(col. 5, lines 64-67 and col. 6, line 1). This teaches the all the changed stored in the log

file 220. Therefore, it would have been obvious to one ordinary skill in the art at the

time of the invention was made to combine the teaching of Barber and courter because

allowing the log file 220 to store all the change to the records would allow the log

system to update the most recent data in the event of system failures.

Regarding on claim 9, Courter teaches the first log file resides in virtual storage

(buffer) (col. 1, lines 28-29).

Regarding on claim 10, Courter teaches the first log file resides in dataspace

(table space) (col. 1, lines 25-26).

Regarding on claim 11, Courter teaches the first log file resides in hiperspace

(col. 1, lines 25-26).

Regarding on claim 12, Courter teaches the first log file resides in DASD (col. 5,

lines 18-20).

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Contact Information

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-

1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached

on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached at (703) 305-9790.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is

assigned are as follow:

(703) 872-9306 [Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II

2121 Crystal Drive

Arlington, VA 22202

Fourth Floor (Receptionist).

Baoquoc N. To

Dec 18, 2003

JEAN M. CORRIELUS
PRIMARY EXAMINER